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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,339	08/14/2001	Tokuju Oikawa	2870-0171P	6675

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EXAMINER
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CHEA, THORL

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/928,339

Applicant(s)

OIKAWA, TOKUJU

Examiner

Thorl Chea

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05/26/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 26, 2006 has been entered.

2. Claims 1-22 are pending in this instant application.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added language “, each layer on the image-forming layer side of the support comprising ingredients; each of which does not substantially contains  $\text{NH}_4^+$ , by applying a fluid containing the ingredient to the surface, the pH of the fluid not modified by pH modifier or the pH of the fluid being modified with a pH modifier that does not contain  $\text{NH}_4^+$ ” in claim 1 raises the issue of new matter since the specification as originally filed fails to provide support of such negative limitation. “Any negative limitation or exclusionary proviso must have basis in the

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original disclosure. See *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). »

The specification as a whole fails to disclose the new concept presented in the claimed invention. The specification on page 4, lines 28-32 at least one of the layer formed on the image-forming layer side of the support contains at least one compound selected from compounds represented by the following formula (1), (2) or (3), and the  $\text{NH}_4^+$  content in all layers formed on the image-forming layer side of the support is  $0.06 \text{ mmol/m}^2$  or less; on page 92, lines 25-25 discloses pH modifier (Type shown in Table 1) and the amount required for adjusting pH of the coating solution; pages 105, lines 28-37 discloses the quantitative determination of  $\text{NH}_4^+$  presented in Table 1; Table 1 on pages 106, samples 1-4 discloses the comparative samples contains nucleating agent Y and type of pH modifier  $\text{NH}_4\text{OH}$  or  $\text{NH}_4\text{OH/NaOH}$ ; the comparative samples 1-6 to 1-8 contains nucleating agent No. 62 and type of pH modifier  $\text{NH}_4\text{OH}$  or  $\text{NH}_4\text{OH/NaOH}$ ; and the inventive samples 1-9 and 1-11 contains 1-8 contains nucleating agent No. 62 and NaOH as pH modifier; the inventive samples 1-10 contains nucleating agent No. 62 and  $\text{NH}_4\text{OH}$  as pH modifier. In Table 2, samples 2-1, 2-2, 2-3, 2-5 contains  $\text{NH}_4\text{OH}$  as pH modifier, compound no. 62 and the surface pH changes from immediately after preparation and after storage at  $50^\circ\text{C}$ , 75 %, 3 days; the inventive samples 2-4 , 2-6 contains NaOH as surface modifier and compound 62. Table 2 shows that the samples contains NaOH as pH modifier have more stability in film surface pH than the samples containing ammonium hydroxide. The amount of  $\text{NH}_4^+$  contains in the samples in Tables 1-2 are related to the use of the  $\text{NH}_4\text{OH/NaOH}$  in the image forming layer. See pages 91-92 under "preparation of coating solution for the image-forming layer".

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Therefore, the specification as originally filed is related to control the pH of the image-forming layer using pH modifier such as  $\text{NH}_4\text{OH}/\text{NaOH}$ , but not whether each of the ingredients contains in the photothermographic material contains  $\text{NH}_4^+$  or not. The content of  $\text{NH}_4^+$  is derived from the type of surface modifier to control the pH of the 'image-forming layer'. Moreover, the  $\text{NH}_4\text{OH}$  was not excluded as pH modifiers at the time of filing the instant application. See Table 1, samples 1-10 wherein  $\text{NH}_4\text{OH}$  used as pH modifier. Therefore, the specification considered as a whole fails to provide the negative limitation presented in the claimed invention, and such limitation raises the issue of new matter.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-16, 18-22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese Patent N0. 112072 (JP'072).

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The JP'072 discloses a photothermographic material contains a compound of formula (1), (2) and (3) in condition (I) and the compound of formula (II) claimed in the present claimed invention. See claims 1-4; paragraph [0098] to [0100] and Table 1 in paragraph [0285]. The samples 12-14 contain NaOH as pH modifier. Thus, the samples contain no  $\text{NH}_4^+$  which is within the scope of  $0.06 \text{ mmol/m}^2$  claims in the present claimed invention; the samples 6-11, 18-25 contains ammonium hydroxide which meet the limitation in condition "do not substantially contains" ammonia (i.e.  $\text{NH}_3$ ). Therefore, the invention as claimed lacks novelty. Alternatively, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to a known acid or base discloses in JP'072, paragraphs [0098] to [0100] to adjust the film surface pH of 5.5 or less to provide an invention with similar pH. The results presented in Table 1, [0285] shows low  $D_{\text{min}}$ , sufficient shelf life in which  $D_{\text{max}}$  is high. The worker of ordinary skill in the art would have to a base or an acid to control the film surface pH within this range with an expectation of achieving a material with highly improved fogging, low  $D_{\text{min}}$  and high  $D_{\text{max}}$ .

8. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent NO. 112072 (JP'072) as applied to claims 1-16, 18-20 above, and further in view of Ito et al and EP' 1096310. Ito et al in column 82 lines 16-30 discloses phosphorus oxide-derive compound as contrast enhancer for a photothermographic material. See also EP'310 on page 79, claim 8, and the control of film surface pH on page 52, paragraph [0200].

It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phosphorus oxide-derive compound taught in Ito et al and EP'310 as contrast enhancer for the material of JP'072, and thereby provide a material as claimed.

***Response to Arguments***

9. Applicant's arguments filed May 26, 2006 have been fully considered but they are not persuasive because of the reason set forth in the Final office action on May 3, 2005. The present claimed invention is related to the selecting the pH modifier to control the pH of the image forming layer such as the use of  $\text{NH}_4\text{OH}$  or  $\text{NaOH}$ . The specification disclosure shown that the pH of the image forming layer is more stable when  $\text{NaOH}$  or low amount of  $\text{NH}_4\text{OH}$  is used. In order to achieve, the stability of the pH of the photothermographic material, the worker of ordinary skill in the art would have selected the pH modifier such as  $\text{NaOH}$  shown in Table 1 on page 54 since it has been known ammonia is volatile and the pH of the material would be change during storage due to the teaching of JP'072, page 17, [0098] to [0101]. The applicants' argument with content  $\text{NH}_4^+$  in the LACSTAR 3307B used in the exemplified sample in JP'072 is not persuasive since the scope of the claim is not limit any type of binder. The binders claimed in the present invention encompasses any scope of binder taught in JP'3307B. It is improper to differentiate to invention as claimed in view of the teaching of JP'072 in view of the type of binders since no binders are included in the present claimed invention. Moreover, the Declaration is directed only to the LACSTAR 3307B exemplified in JP'072 while JP'072 discloses a different binder such as shown on page 39, [0201]. While the Declaration is directed to the use of SBR latex prepared using  $\text{K}_2\text{S}_2\text{O}_8$  and the use of  $\text{NaOH}$  as pH modifier, the invention as claimed is not directed to such SBR latex prepared using  $\text{K}_2\text{S}_2\text{O}_8$  and the use of  $\text{NaOH}$  as pH modifier. Therefore, the Declarations and the argument is not commensurate with the scope of the claimed invention.

***Conclusion***

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tchea *tlh*  
June 22, 2006

*Thokhea*  
Thorl Chea  
Primary Examiner  
Art Unit 1752